

Title (en)
LONG-LASTING REABSORBABLE SUBCUTANEOUS IMPLANT WITH SUSTAINED RELEASE OF PRE-CONCENTRATED PHARMACOLOGICALLY ACTIVE SUBSTANCE IN POLYMER FOR THE TREATMENT OF ERECTILE DYSFUNCTION AND BENIGN PROSTATIC HYPERPLASIA

Title (de)
LANGANHALTENDES RESORBIERBARES SUBKUTANES IMPLANTAT MIT VERZÖGERTER FREISETZUNG VON VORKONZENTRIERTER PHARMAKOLOGISCHER WIRKSUBSTANZ

Title (fr)
IMPLANT SOUS-CUTANÉ RÉABSORBABLE DE LONGUE DURÉE À LIBÉRATION ?PROLONGÉE DE SUBSTANCE PHARMACOLOGIQUEMENT ACTIVE PRÉ-CONCENTRÉE EN POLYMÈRE POUR LE TRAITEMENT DE LA DYSFONCTION ÉRECTILE ET DE L'HYPERPLASIE BÉNIGNE DE LA PROSTATE

Publication
EP 4159206 A4 20240424 (EN)

Application
EP 20937806 A 20200831

Priority
• BR 102020010933 A 20200529
• BR 2020050346 W 20200831

Abstract (en)
[origin: EP4159206A1] The present application for priority of invention is directed to the medical sector and comprises a biodegradable implant containing tadalafil in a polymer matrix. This implant is inserted into the subcutaneous layer of the patient and has continuous release of the pharmaceutical active over an extended period of time. The release aims to achieve an efficient and prolonged serum level of pharmacy for the treatment of erectile dysfunction and benign prostatic hyperplasia. The implant may have in its constitution only tadalafil, but is preferably formed by tadalafil particles dispersed homogeneously in a biocompatible and biodegradable polymer matrix. The polymer matrix may be formed by only one polymer or by a mixture of polymers. The implants have a shape and size that facilitates their insertion into the patient and provides a prolonged and uniform release of the active ingredient contained. The drug is released constantly, throughout the treatment period. Furthermore, the implant can contain a polymer coating wall and, as such, the duration of the treatment can vary between 3 and 6 months, thereby configuring the proposed period of time between the insertions of new implants.

IPC 8 full level
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CPC (source: EP US)
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Citation (search report)
• [X] WO 2009058147 A1 20090507 - CELONOVA BIOSCIENCES INC [US], et al
• [X] WO 2010082910 A1 20100722 - UNIV TEXAS [US], et al
• [X] WO 2019191132 A1 20191003 - UNIV CALIFORNIA [US]
• [X] US 2018250355 A1 20180906 - AVERBACK PAUL [BS]
• [X] WO 2007010337 A2 20070125 - PROXOMOMED MEDIZINTECHNIK GMBH [DE], et al
• [X] WO 2010123547 A1 20101028 - EINSTEIN COLL MED [US], et al
• [X] US 2008226723 A1 20080918 - FRITZ OLAF [DE], et al
• [Y] WO 2007089544 A2 20070809 - ALLERGAN INC [US], et al
• [Y] PETR KUZMA-- ET AL: "SUBCUTANEOUS HYDROGEL RESERVOIR SYSTEM FOR CONTROLLED DRUG DELIVERY", HIGH-SWELLING GELS : PLENARY LECTURES PRESENTED AT THE 36TH MICROSYMPOSIUM ON MACROMOLECULES HELD IN PRAGUE, CZECH REPUBLIC, 10 - 14 JULY 1995; MACROMOLECULAR SYMPOSIA; ISSN 0258-0322,, vol. 109, 1 January 1996 (1996-01-01), pages 15 - 26, XP009552634, ISBN: 978-3-85739-306-8
• [Y] PAVEL KRATOCHVÍL ET AL: "Sustained release hormonal preparations: 6. Permeability constant of various steroids", STEROIDS, ELSEVIER SCIENCE PUBLISHERS, NEW YORK, NY, US, vol. 15, no. 4, 1 April 1970 (1970-04-01), pages 505 - 511, XP009552636, ISSN: 0039-128X, DOI: 10.1016/S0039-128X(70)80079-4
• See references of WO 2021237322A1

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DOCDB simple family (application)
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